Common Alerting Protocol (CAP) Standard

A Breakthrough in All-Hazards, All-Media Public Warning

air quality
cyclone
earthquake
tsunami
disease

Common Alerting Protocol

sirens
radio
television
telephone
Internet

Nothing challenges our humanity and modern technology more than a major disaster. From many events, in places around the world, societies still suffer horribly. Lives that might have been saved are yet lost, often for lack of solid, timely warnings. We must get warnings to everyone who needs them, and to only those who need them.
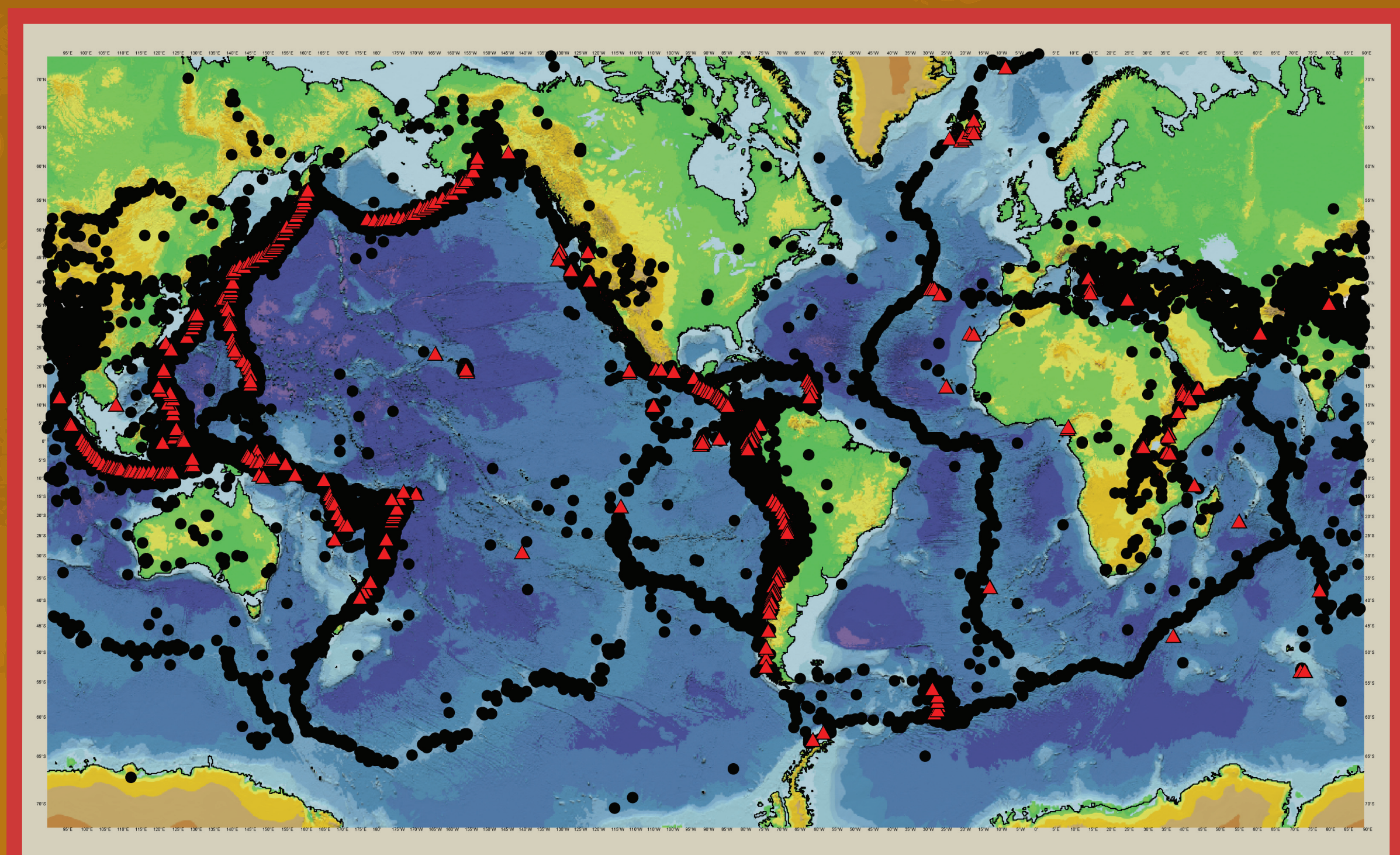
As a recent breakthrough, the Common Alerting Protocol (CAP) provides a standard for all-hazard warnings across all communications media. CAP addresses the long-standing need to coordinate all of the mechanisms used for warnings and alerts.

CAP serves as a universal adaptor for alert messages. With a single input, an alerting authority can activate multiple warning systems. Along with text instructions and a description of the event, CAP messages convey an event's "Urgency," "Severity," or "Certainty." Location-aware devices can use the coordinates in a CAP message to reach every cell phone in a specific location. CAP is also useful for multilingual populations and persons with disabilities.

Any official alerting authority worldwide can take advantage of the commercial vendor offer of no charge, high-performance, high-reliability hosting of CAP alerts, including authentication.

Official CAP alerts for earthquake and volcano events around the world are already available. In some regions, experimental CAP alerts for severe weather and other kinds of events are available. The U.S. is updating its national Emergency Alert System to require CAP-based public warning by wireless communications and other service providers.

The International Telecommunication Union (ITU) urges all member states to implement the CAP standard, ITU Recommendation X1303. Guidelines for developing nations are being published by the ITU Development sector.

Earthquakes and volcanoes locations since 1900, courtesy of Smithsonian Vulcanology Program.

http://www.oasis-open.org/committees/emergency/